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**HUMAN RESOURCE MANAGEMENT AND OPERATIONAL READINESS
AS MEASURED BY REFRESHER TRAINING ON NAVY SHIPS**

Sandra J. Mumford

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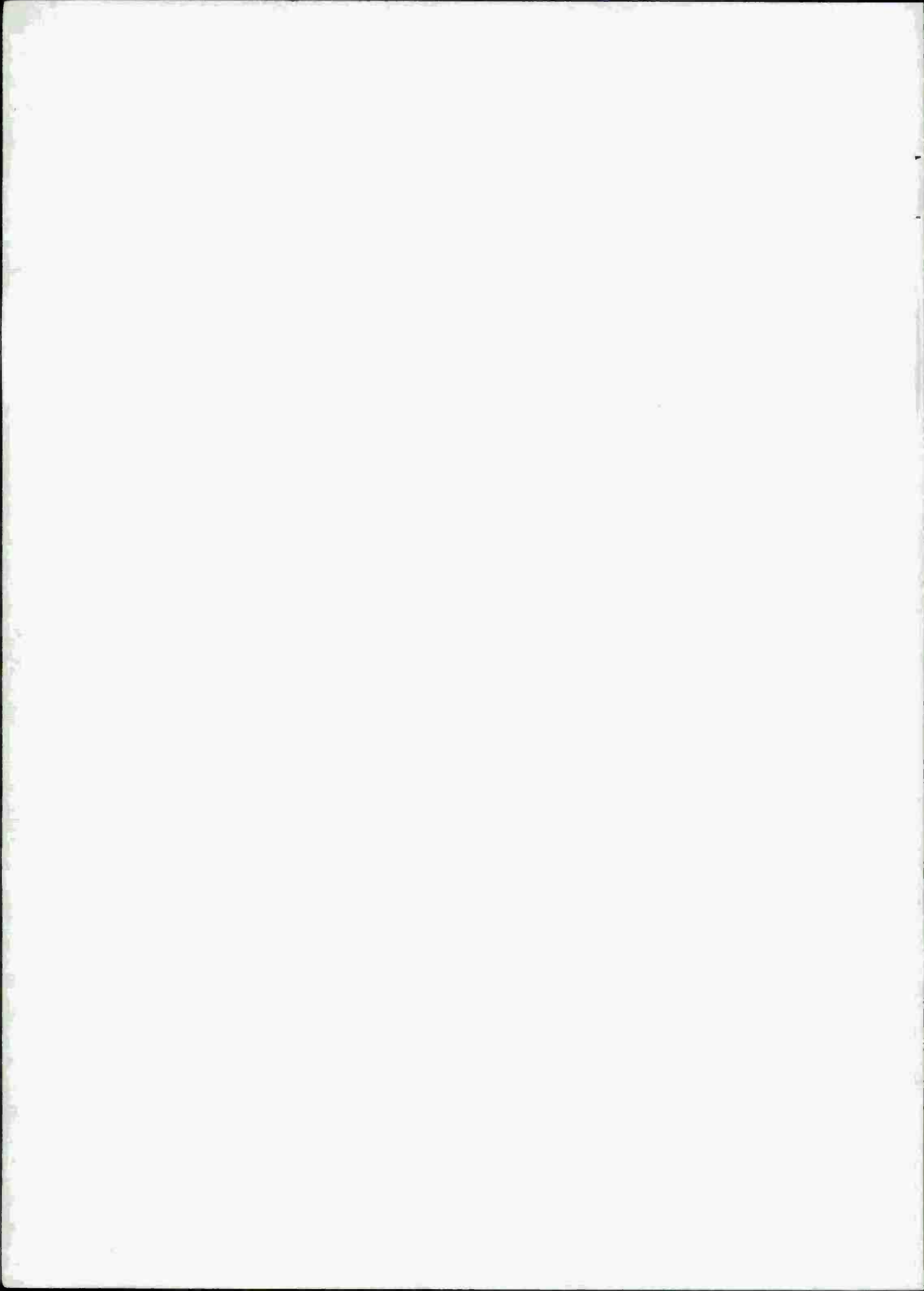


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The Navy in 1973 instituted a Human Goals Plan to ensure both a high level of combat effectiveness and personnel excellence. For the current study, scores earned by ships during Refresher Training (REFTRA) were used as a dependent measure of combat effectiveness or readiness for combat. The indices on the Human Resource Management (HRM) Survey were used as the independent measure of personnel or organizational excellence. The nature and strength of the relationship between these two measures is the focus of this study. It was hypothesized

20. ABSTRACT (continued)

that the more effective the human resource management system within a ship, the higher the REFTRA scores.

REFTRA scores were obtained for 34 ships that had been surveyed as part of the HRM program. Each ship had either one or two scores, depending on which type of REFTRA--full or interim--has been conducted.

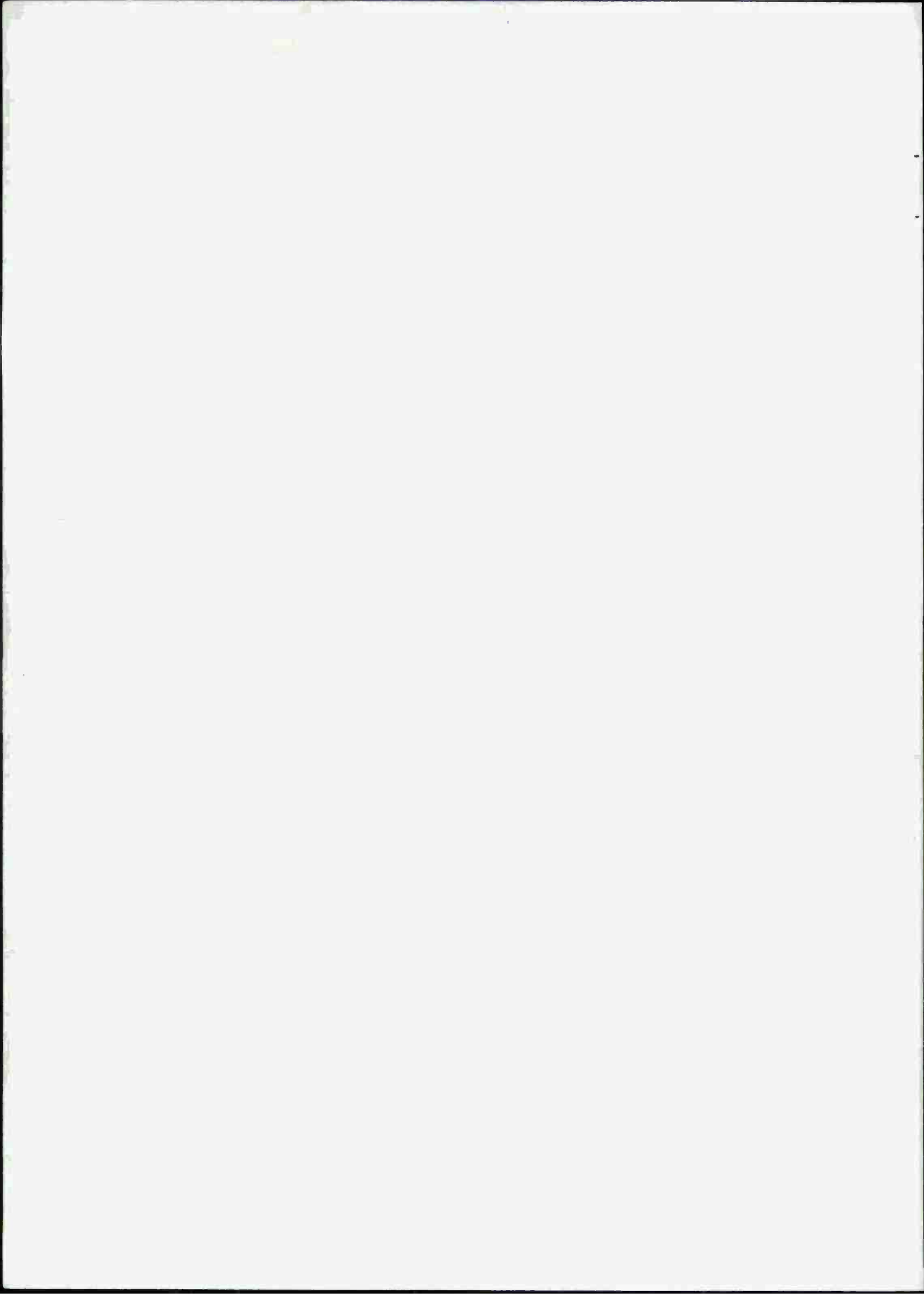
Using the overall weighted REFTRA averages for the 16 ships that had undergone full REFTRA, the correlation coefficients between REFTRA and those perceptions assessed by the HRM Survey strongly supported the research hypothesis. All coefficients were in the predicted direction and over half reached significance at the .01 level of confidence. The highest correlations were found with indices that stressed team effort and coordination. The strongly positive relationships were not sustained using the unweighted averages of interim REFTRA. Comparisons of extreme groups on the HRM Survey indices revealed that the high HRM ships scored up to 4.16 points higher in REFTRA.

FOREWORD

This study was performed in support of the Navy Human Goals Program. The study is part of a larger effort which is attempting to determine the impact of the Navy Human Resource Management Program on several criteria of organizational effectiveness.

Commander Training Command, Pacific and Fleet Training Group (FLETRAGRU), San Diego were most cooperative in providing refresher training data. In particular, LCDR J. Brickett, formerly with FLETRAGRU and YN1 P. Beausoleil currently with FLETRAGRU were most informative and patient. Their assistance is gratefully acknowledged.

J. J. CLARKIN
Commanding Officer



SUMMARY

Problem

To ensure both a high level of combat effectiveness and personnel excellence, the Navy in 1973, instituted a Human Goals Plan. One of its central components is the Human Resource Management (HRM) Program which is designed to directly assist commands through survey guided development. The diagnostic instrument used in this program is the Navy Human Resource Management Survey.

Previous research has supported the relationship between the survey scores and organizational criteria descriptive of the behaviors of individuals (such as reenlistment rates). A different criterion measure, namely operational performance, was needed to balance the picture.

Purpose

The purpose of the present study was to determine the nature and strength of the relationship between a ship's human resources and its operational performance. The performance measures used were the scores earned by ships during a required periodic employment known as Refresher Training (REFTRA).

Approach

It was hypothesized that REFTRA scores would be positively related to the HRM Survey index scores. Refresher training scores were obtained for 34 Pacific Fleet ships that went through the HRM program subsequent to REFTRA. Each ship had either one or two overall scores, depending upon which type of REFTRA--full or interim--had been conducted. That is, 16 ships had the weighted averages computed for full REFTRA and 18 ships had simple arithmetic averages based on final battle problem scores from interim REFTRA. Each ship's HRM Survey data were aggregated to generate overall mean scores for 16 survey indices.

Correlation coefficients were computed between the HRM indices and the REFTRA averages. In addition, REFTRA scores were compared for two groups, ships scoring high and ships scoring low on the HRM Survey. The effect of the time differential between REFTRA and the administration of the survey was also examined.

Findings

All correlations between HRM Survey indices and the overall weighted REFTRA averages were positive. Over half (56 percent) of the coefficients reached significance at the .01 level. The strongest correlations were for indices containing direct reference to the work group and team effort. Such strong relationships were not sustained using the unweighted averages (interim REFTRA). Comparisons of the lowest and highest groups

showed that ships responding at higher levels on the HRM Survey averaged 2.79 points higher in REFTRA. There was a difference of over 4 points for two peer/work group indices. Analysis revealed that there was no significant change in the relationship over time.

Conclusions and Recommendations

The present study, using a mission-oriented criterion, supports the prediction that effective human resource management has a strong relationship with operational effectiveness.

It is recommended that postsurvey REFTRA data be collected and analyzed to better determine the impact of the HRM program on operational readiness. It is further recommended that the analyzable sample of ships be expanded by developing a weighted average for interim REFTRA and investigating the equivalence of Atlantic and Pacific REFTRA scores.

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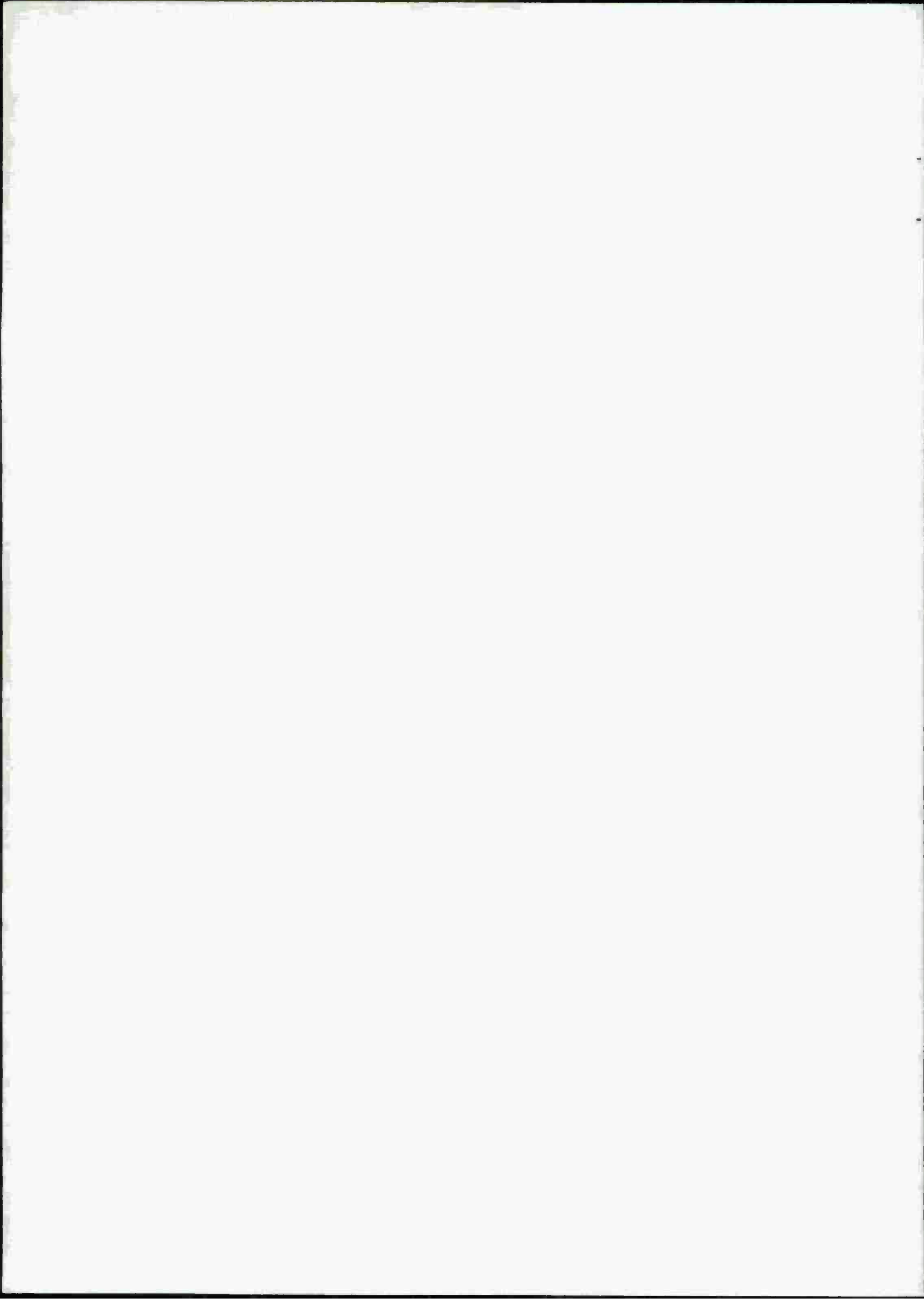
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INTRODUCTION

Problem

The surface Navy, in its 200th year of operation, has been described by President Gerald R. Ford as "a vital part of our defense establishment (Speech at the 73rd Annual Navy League Convention in New Orleans)." Traditionally, the Navy has met its primary mission through its human resources and up-to-date, sophisticated equipment. These two factors in combination add up to effectiveness in combat.

To ensure both a high level of combat effectiveness and personnel excellence, the Navy has instituted a Human Goals Plan (OPNAVINST 5300.6; OPNAVINST 5300.6a) directed toward "the development of the full potential of the Navy's human resources and the application of that potential toward maximum effectiveness in the performance of the Navy's primary mission."

Purpose

The duties of a Navy ship consist of a variety of missions related to its design plus designated responsibilities contingent upon operational requirements. However, the most important goal of any combat ship is battle readiness. Common sense dictates that a link must exist between a ship's human resources and its effectiveness in combat. Determining the nature and strength of this relationship is the purpose of this study.

Background

Human Resource Management

In order to empirically establish the relationship between systemic or organizational variables and combat readiness, a measure of command climate and shipboard relationships was required. The Human Resource Management (HRM) Program, which is part of the Navy's Human Goals Plan, includes such an assessment as one of its central components. As described in the Commander's Notebook (Note 1), distributed by the HRM Centers to all participant commands, this program "provides a procedure, the Human Resource Management Cycle, through which commands can identify issues and take appropriate actions to meet the requirements of the Human Goals Plan" (emphasis added). This cycle is presented graphically in Figure 1. The primary sources for issue identification are: (1) interviews with shipboard personnel and (2) a standardized data collection instrument, the Navy Human Resource Management Survey, which is shown in Appendix A and discussed below.

HRM Survey

The historical development of the survey and studies relevant to the theoretical work on which the survey was based have been discussed

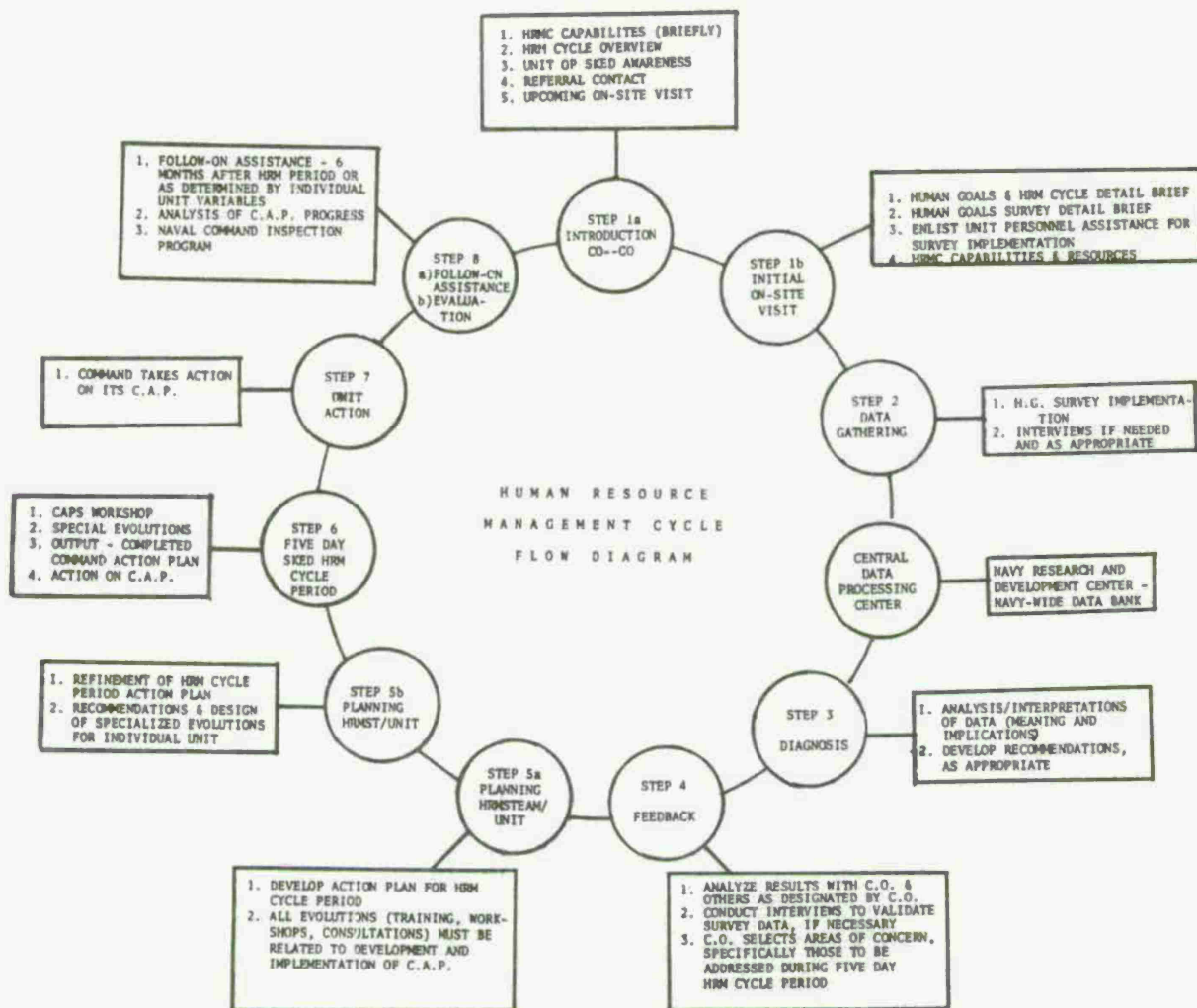


Fig. 1. Human Resource Management Cycle Flow Diagram.

thoroughly by Crawford and Thomas (1975). Important points will be highlighted here.

The Navy HRM Survey represents a modification of the Survey of Organizations (S00), developed by the University of Michigan's Institute for Social Research (Taylor & Bowers, 1972). Likert's organizational behavior model provided the theoretical framework used in developing the instrument. Likert (1967) theorized that two core variables, organizational climate and leadership behaviors, as mediated by the peer influences and work group processes in an organization, affect the worker's performance and satisfaction. Likert's model has been found to be reasonably appropriate for both Navy and civilian organizations (Bowers & Bachman, 1974), however, peer leadership seems to be a more critical link to work group processes for Navy samples than for civilian samples (Franklin, 1974).

The purpose of the S00, as well as the Navy HRM Survey, is to pinpoint the systemic barriers which restrict overall organizational performance. The results obtained from examining the relationships between climate factors measured by the S00 and performance criteria have been equivocal, even though strong relationships have been found between climate and satisfaction (Campbell, Bownas, Peterson & Dunnette, 1974).

Despite the lack of correlation between climate and performance in civilian studies, positive results from using Navy data were reported by Drexler and Bowers (1973). These investigators analyzed retention rates for a sample of ships and air squadrons and found that those organizations having higher survey scores also had better retention rates. The strongest support to date for the relationship between the survey scores and organizational criteria is provided by Crawford and Thomas (1975). These researchers found that reported shipboard rates of minor disciplinary offenses, Nonjudicial Punishment (NJP), were strongly related to the organizational conditions on those ships. These findings suggest that there is a reliable negative relationship between NJP rates and the human resource structure and relationships in a ship.

The criterion variables thus far discussed--retention rates and nonjudicial punishment--are measures descriptive of the behaviors of individuals within the organization. Although these variables are of major interest to the Navy, another criterion--combat readiness--reflecting team effort is needed to balance the picture. In terms of payoffs for the Navy, it is well and good that ships are manned by happy crews who get into little trouble and reenlist at high rates. However, more importantly, these ships must demonstrate operational effectiveness.

Criterion Development

The literature is replete with attempts, not always successful, to relate various dependent measures to organizational effectiveness.

✓ Campbell et al. (1974) presented a list of 26 variables (pp. 39-40) that have been used to describe organizational effectiveness. Some have been tested empirically while others remain as only suggestions. It appears that the effectiveness of an organization can be described by either a group of personnel-oriented variables, such as absenteeism, motivation, and turnover, or by a comparable set of items that relate to productivity, such as efficiency and profit. A Navy ship produces no product per se, but it does have tasks to accomplish and goals to achieve. Its primary mission is to perform in battle or in support of ships in battle. Since the peacetime Navy is not confronted with veridical battle situations, it appears that "readiness," an item on the Campbell et al. list of potential dependent variables, is a likely candidate for criterion development. Readiness is defined as "an overall judgment concerning the probability that the organization could successfully perform some specified task if asked to do so" (Campbell et al., 1975, p. 123). The little empirical work that has been accomplished using this variable has been done largely by the military. Specifically, the Navy systematically assesses and improves the readiness of its ships during required periodic employment known as Refresher Training (REFTRA).

Refresher Training

Each ship is expected to accomplish its own basic training; however, for more advanced team training, it receives a customized training package tailored to its mission. This package consists of (1) a training readiness evaluation (TRE) to establish the initial level of training and equipment status, (2) standard training requirements (STRs), which consist of numerous exercises in such specific areas as engineering or communications, and (3) battle problems, which consist of operating the entire ship during 2 to 3 hours of simulated battle conditions. The purpose of REFTRA is to develop and train the teams that fight a ship during battle, e.g., the ship control team, damage control teams, etc. The TREs, STRs, and battle problems are prepared, conducted, and analyzed by the fleet training groups (FTGs) on each coast. FTG Teams of 30 to 60 skilled instructor/observers are utilized in a ship not only to instruct inexperienced personnel but also to objectively grade the exercises and battle problems.

Certain factors act as possible sources of variance in the scores earned by ships during REFTRA. For, example, different types of REFTRA are conducted at various points in a ship's career. Following a major overhaul, when there has been a large turnover of personnel resulting in a high need for building team skills, a ship goes through a full REFTRA. Between yard periods, the ship may be scheduled for an interim REFTRA, which is conducted either pre or postdeployment (extended overseas operations) depending upon the ship type. Typically, amphibious ships are scheduled for an interim REFTRA following a deployment, whereas destroyers undergo an interim REFTRA prior to a deployment. "Shakedown" REFTRA occurs when a ship first enters service or undergoes major conversion.

The length of and the components making up the three types of REFTRA also contribute to the variability between REFTRA scores. In general, interim training is shorter than full or shakedown training (which are essentially identical). The TREs are the same for all three types, but the STRs differ in the number scheduled or made up (in cases where exercises¹ are not completed or cancelled due to unavailability of services). In other words, the STRs conducted during a 2-week interim REFTRA would be basically the same as those conducted during a 2-week full REFTRA, but a full REFTRA generally lasts longer than 2 weeks. Ship type also determines the length of time that a ship is in REFTRA. Cruisers and destroyers go through a "two-phase" REFTRA: the first phase of REFTRA separated from the second phase by six to eight weeks devoted to training for the Propulsion Examining Board (PEB) inspection. Amphibious ships generally undergo 2 weeks of interim training and four weeks of full REFTRA. Auxiliaries experience 2 weeks of both full and interim training.

Full REFTRA is preceded by an in-port week of operational stand-down, during which time the FTG team assists the ship in organizing its combat team. At this time, many crew members are sent to shore-based schools for team training in such areas as firefighting, Combat Information Center (CIC), and gunnery. This week is not required for interim training, with the result that interim training generally takes place completely at sea.

The final battle problem (FBP) is the "final exam" for REFTRA. A ship in interim REFTRA generally conducts one practice battle problem prior to the FBP for which grades are recorded. A ship in full REFTRA has a training and a midterm battle problem prior to the final battle problem. The script for the initial 30 minutes of a sample battle problem is presented in Appendix B.

The purpose of the battle problem is to test the battle organization of the ship. It provides a "medium for testing and evaluating the ability of all departments to function together as a team in simulated combat operations, while accomplishing the missions or tasks assigned by the problem, and in handling casualties" (Chief of Naval Operations, Note 2). Simulation is by no means a new technique for training and research purposes. As defined in a NASA report (Fraser, 1966, p. 2), "simulation is the art and science of representing the essential elements of a system out of their normal setting in such a manner that the representation is a valid analog of the system under study." The Navy strives to make the battle problem that concludes REFTRA a valid analog of combat at sea.

¹Exercises started but not completed are scored as zero. Exercises cancelled by circumstances beyond a ship's control are not counted at all.

Thorough attention is given to achieving a high degree of realism. For example, other ships and aircraft represent the enemy whenever practicable, the engineering plant is operated in accordance with the requirements of the tactical situation, equipment casualties are simulated by opening control circuits and the like, an actual list or change of trim may be incurred, and aids such as smoke pots or nonfragmentary hand grenades may be used. This is as real a test of combat readiness as can currently be devised by the Navy within reasonable fiscal constraints. As such, it lends itself well to being a measure of organizational effectiveness criterion or outcome variable.

APPROACH

Research Hypothesis

It was predicted that a ship that is perceived by its crew as being committed to the most effective utilization of its human resources would concomitantly achieve excellence in a simulated combat situation. If this is the case, refresher training scores will be positively related to the HRM Survey indices.

An alternative hypothesis is that a ship that achieves high scores in REFTRA will be perceived by its crew members as being effectively managed. However, since few ships had gone through REFTRA after the HRM Survey was administered, criterion data for this study had to be collected for a time frame preceding survey administration. Further, Likert's causal flow model postulates the direction of the causal flow to be from the organization to output variables that is, command climate, supervisory relationships, and peer relationships influence work group processes, satisfaction, and other outcome measures. This is the framework within which the data in this study are interpreted.

Independent Variables: HRM Survey Indices

The HRM Survey in operational use includes 88 questions, which are aggregated into 26 indices. The first 18 of these indices are considered central to the causal flow model. These 18 indices are grouped under 5 major dimensions: (1) Command Climate, (2) Supervisory Leadership, (3) Peer Leadership, (4) Work Group Processes, and (5) Outcome Measures. Two of the indices under Command Climate, Decision Making and Lower Level Influence, contain new items and could not be used in the present investigation. Thus, 16 of these indices were used as the independent variables in this study. The remaining six survey indices relate to special issues of current concern such as drug abuse and alcoholism prevention, and therefore were not used in this study. (See Appendix C for descriptions of all the indices.)

Respondents answer the survey questions on a Likert-type scale ranging from 1 (to a very little extent) to 5 (to a very great extent). Questions related to the satisfaction index were similarly scaled from 1 (very dissatisfied) to 5 (very satisfied). The number of questions related to a particular index ranged from 2 to 11. Index means were obtained by summing individual item responses for each index and then dividing this total by the number of items used. Thus, each index mean represents the average perception of the individuals aboard a particular unit or group of units--in this case, ships. The reliability of the HRM Survey has been shown to be slightly less than that of the Survey of Organizations (SOO) (Taylor & Bowers, 1972). These lower alpha reliability coefficients may be an artifact of computational procedures used in determining the reliabilities of the two instruments (Crawford & Thomas, 1975).

Dependent Variables: REFTRA Scores

The dependent variables used in this study were the REFTRA average scores for a select group of ships. As indicated previously, ships accumulate a number of grades throughout the REFTRA period. Standard training requirements as well as final battle problems are graded.² For a full REFTRA, STR and FBP scores are averaged by functional area,² and a combined overall ship average is calculated. However, for an interim REFTRA, the STR and FBP scores are listed by functional area but not averaged; thus, no overall ship average is computed.

For a full REFTRA, the final average grade is obtained by using a weighting procedure that takes into account the ship's mission; that is, the relative importance of each functional area aboard a ship is factored into the averaging formula as determined by ship type. These weights were established by the Type Commands (which have recently been merged to form the Surface Force Commands on both coasts). This procedure compensates for the relative importance of deck operations aboard amphibious ships as contrasted with the relative importance of the gunnery operations aboard destroyer types, and allows a meaningful comparison of the weighted averages across type commands. Both the weighted average of full REFTRA (which includes the STRs and the FBP) and an unweighted FBP average from interim REFTRA were used as dependent variables in this study. Because of the differences in the two averages, they were not used concomitantly in any of the analyses.

Sample

The REFTRA data collected from Fleet Training Group, Pacific, and its organizational superior, Commander Training Command, Pacific (COMTRAPAC),³

²Functional areas are exemplified by CIC operations, engineering, communications, and damage control. While groups assigned to these functional areas approximate divisional and departmental organization, they are not "pure." CIC personnel are augmented in many ships during general quarters (GQ) with other department personnel, such as supply. These additional crew members may or may not be present during STR exercises. During GQ, members of the deck/gunnery department join ship control, gunnery, and damage control teams. However, during an STR exercise like underway replenishment, the deck force would remain intact. Personnel casualty control is not performed by a "team" per se but, rather, the whole ship, since everyone is expected to know basic first aid.

³REFTRA data were also collected for ships in the Atlantic Fleet. However, scores were substantially lower and interim REFTRA grades consisted only of SAT/UNSAT determinations. Refresher training in the Atlantic takes place at Guantanamo Bay under somewhat different conditions than those for the Pacific. For these reasons, Atlantic REFTRA scores were not used at this time.

were examined to identify those ships which had completed the HRM Survey and had conducted REFTRA within an arbitrary cutoff period (18 months) prior to the time surveyed. This provided a total sample of 34 ships, 16 of which had completed a full REFTRA. The average time gap between the REFTRA and the HRM Survey was 8.9 months. The four major Type Commands are represented in the sample, as shown in Table 1.

Table 1

Distribution of Sample by Type Command and
Type of Refresher Training

Type Command	No. of Ships in Sample		No. of Survey Respondents
	Refresher	Interim	
Destroyer Force, Pacific	5	4	1,659
Amphibious Force, Pacific	5	4	2,440
Service Force, Pacific	6	6	2,138
Naval Air Force, Pacific	0	4	5,330
Total	16	18	11,567

A comparison was made between the average scores for the sampled ships and all ships evaluated by FTG in 1974 (COMFLETRAGRU Point Paper, Note 3). This revealed that there was no difference in the averages for two of the Type Commands (SERVPAC and AIRPAC) and only a very slight difference in the averages for the remaining Type Commands. Overall, the averages were virtually identical (82.8 for the sampled ships vs. 83.0 for all ships), indicating that the scores of the sampled ships were typical of those graded at a comparable point in time. The HRM Survey was administered to the ships in this study during the 13-month time frame from December 1973 to January 1975.

Analysis

Two overall scores were used: (1) the weighted average based on STR and FBP grades calculated for each of the 16 ships that went through full REFTRA, and (2) an arithmetic average derived from the FBP scores for nine functional area teams⁴ aboard all 34 ships. Thus, each ship

⁴The nine teams were ship control, navigation, weapons, CIC, communications, electronics, engineering, damage control, and personnel casualty control.

had one or two scores, depending upon which type of REFTRA it had experienced. These weighted and unweighted averages were compared to determine the degree to which they were related. As shown in Table 2, the measures are highly interrelated and had an average correlation of .75.

Table 2

Type Command Correlations Between
Weighted and Unweighted Averages
For Full Refresher Trained Ships

Type Command	<u>r</u>
Service Force, Pacific	.54
Amphibious Force, Pacific	.71
Destroyer Force, Pacific	.92

A comparison of the difference in the mean scores across Type Commands indicated that Type Command could be a moderating influence on REFTRA scores. This was evaluated in two ways: (1) analysis of variance (ANOVA) for the unweighted and weighted means by Type Command, and (2) a comparison of the ranges of means across Type Command. The results of the ANOVA showed that there were no significant main effects attributable to Type Command. Comparing the ranges of the means, as shown in Table 3, indicates that the average scores overlap, except in the case of NAVAIRPAC's restricted range, indicating that, in general, there is a large amount of commonality in scores among the Type Commands. In summary, it was decided to retain both types of averages as criterion measures since they were related and to combine the data for all ships since Type Command had little influence on the scores.

Concurrent validity between the HRM Survey averages and REFTRA scores was established by computing Pearson Product Moment correlations (McNemar, 1969). An extreme groups comparison was drawn based on the independent measure (Feldt, 1961). The moderating affect caused by the time gap between REFTRA and survey administration was examined using Fisher's Standard Score transform and a t test for different between coefficients of correlation (Guilford & Fruchter, 1973).

Table 3
Ranges of Refresher Training
Averages by Type Command

Type Command	Weighted Averages	Unweighted Averages
Service Force, Pacific	75-92	77-85
Amphibious Force, Pacific	77-85	78-85
Destroyer Force, Pacific	79-86	71-90
Naval Air Force, Pacific	None	82-93

RESULTS AND DISCUSSION

Relationship Between REFTRA and HRM Survey Averages

The correlation coefficients between weighted REFTRA averages and HRM Survey scores are presented in Table 4. The hypothesized relationship between REFTRA and the HRM Survey is strongly supported by the correlation coefficients. They were all in the predicted direction (positive), and 56 percent reached significance at the .01 level of confidence. Additional support for the hypothesized relationship could be derived from the content of the indices with strongest correlations. The five highest ranked indices refer directly to the work group and to team effort, which are the foundations upon which the REFTRA scores attributed to a ship are earned. Without considering these results, it seems logical to expect that those teams who, to a great extent, perceive the work group as maintaining high standards of performance, encouraging group members to give their best effort and work as a team, stressing a team goal, and being able to effectively deal with emergency situations and mission requirements would be able to handle REFTRA exceptionally well. The data lend empirical evidence to support that expectation. The content of the two highest ranked indices epitomizes refresher training and, in particular, the final battle problem.

In contrast, the low correlation between satisfaction and REFTRA scores corresponds with ideas expressed to the author by FTG personnel. They contended from the outset that performance in REFTRA is not necessarily related to personal satisfaction or happiness of the crew but to other, more decisive factors such as the commanding officer's ability to wield his crew into smoothly functioning teams.

Correlations using the unweighted averages, shown in Table 5, were considerably less positive than the weighted averages. Only one index reached statistical significance at the .05 level and the correlations for five indices were negative rather than positive. This suggests that REFTRA scores which include the graded STR exercises and are weighted by the ship's mission are related to the combined perceptions of a ship's crew regarding its human organization. When battle effectiveness, as measured exclusively by the final battle problem, is calculated as a simple arithmetic average and this average is correlated with the HRM Survey indices, the strong, positive relationships noted with the weighted average are not sustained. This indicates that the interim REFTRA grades are not useful as they stand now for describing the human resource management aboard a given ship. Although these measures may well reflect the state of training aboard the ship, correlations using the unweighted averages relate only minimally to the organization as assessed by the HRM Survey.

Extreme Group Breakouts

The relationship between the weighted REFTRA averages and the HRM Survey can be further described by comparing those ships with high mean

Table 4

Rank Order of Correlations Between Full Refresher
Training Unit Averages and HRM Survey
Indices for 16 Navy Ships

HRM Survey Index	HRM Survey Dimension ^a					<u>r</u>
	CC	SL	PL	WGP	OM	
Peer Teamwork			X			.75**
Work Group Readiness				X		.74**
Work Group Coordination				X		.71**
Peer Problem Solving			X			.67**
Work Group Discipline				X		.63**
Supervisory Teamwork		X				.62**
Peer Work Facilitation			X			.62**
Peer Support			X			.61**
Supervisory Goal Emphasis		X				.59**
Integration of Men and Mission					X	.47*
Supervisory Work Facilitation		X				.45
Communication Flow	X					.41
Supervisory Support		X				.40
Motivation	X					.26
Human Resource Emphasis	X					.26
Satisfaction					X	.25

^aCC: Command Climate
SL: Supervisory Leadership
PL: Peer Leadership
WGP: Work Group Processes
OM: Outcome Measures

**p < .01

*p < .05

Table 5

Rank Order of Correlations Between Unweighted Final Battle
Problem Averages and HRM Survey Indices for 34 Ships

HRM Survey Index	<u>r</u>
Work Group Readiness	.39*
Peer Work Facilitation	.32
Peer Teamwork	.25
Peer Problem Solving	.20
Supervisory Teamwork	.14
Communications Flow	.11
Work Group Coordination	.11
Integration of Men and Mission	.10
Supervisory Work Facilitation	.04
Human Resource Emphasis	.03
Motivation	.01
Supervisory Goal Emphasis	-.04
Peer Support	-.04
Work Group Discipline	-.08
Satisfaction	-.11
Supervisory Support	-.15

* $p < .05$

levels of response on the HRM Survey to those with lower levels of response. Accordingly, for each index on the survey, the 16 ships that had undergone full REFTRA were separated into two groups--the eight with the lowest survey average, and the eight with the highest. The weighted REFTRA averages calculated for these two groups (which consisted of different configurations for each index) are presented in Table 6. The average difference in REFTRA scores across all indices was 2.79, i.e., ships that had the highest level of survey response scored an average of 2.79 points higher in REFTRA.

The greatest differences between average REFTRA scores occurred, as before, in those indices where the organizational referent was the work or peer group. The most salient indices were Peer Problem Solving and Work Group Coordination, where the difference in REFTRA scores between the high and low groups averaged over four points. This implies that where work group members see themselves as working well together to solve problems and as planning, coordinating, and supporting each other effectively, one can also expect to witness a high degree of effectiveness in handling the problems and tasks presented during refresher training.

The unweighted averages for all 34 ships were subjected to the same descriptive analysis using the extreme group breakout method. In this case, three groups were formed, comprised of the lowest (bottom 27 percent), middle (middle 46 percent), and highest (top 27 percent) ships in terms of their HRM Survey averages. Except for a few indices, the results were erratic, i.e., ships in the highest group did not necessarily have the highest REFTRA average and so forth. The exceptions that did fit the predicted pattern were Peer Teamwork, Work Group Coordination, and Work Group Readiness.

The results from the extreme group breakout method substantiate (1) the usefulness of the weighted averages, (2) the positive relationship between HRM Survey responses and battle efficiency, and (3) the meaningfulness of the survey in relation to a real-world Navy situation: refresher training.

Moderating Influence of Time Gap Between Refresher Training and Survey Administration

The perceptions of a ship's climate that are measured by the HRM Survey are crystallizations of events and experiences that occur 6 to 12 months prior to the survey date (Drexler & Bowers, 1973). This may be modified somewhat by the degree of abstraction of the item referent. That is, when the referent is the organization, the 6 to 12 month time frame seems appropriate. However, when the referent becomes more personal, such as the supervisor, or, closer yet, the work group, responses are apt to be based on more recent experiences. More research is needed to clarify this apparent underlying construct.

Table 6

Comparison of REFTRA Averages with Low and High
Scoring Ships on the HRM Survey (N=16)

HRM Index	HRM Range	REFTRA Average	Difference
A. COMMAND CLIMATE			
1. Communications Flow	2.69-3.04	83.24	
	2.33-2.68	80.88	2.36
2. Motivation	2.56-2.95	82.71	
	2.22-2.55	81.41	1.30
3. Human Resource Emphasis	2.44-3.08	82.90	
	1.84-2.43	81.21	1.69
B. SUPERVISORY LEADERSHIP			
1. Supervisory Support	3.36-3.71	82.26	
	3.11-3.35	81.86	.40
2. Supervisory Teamwork	3.05-3.40	83.30	
	2.76-3.04	80.82	2.48
3. Supervisory Goal Emphasis	3.53-3.81	83.57	
	3.03-3.52	80.11	3.46
4. Supervisory Work Facilitation	2.86-3.03	83.48	
	2.67-2.85	80.64	2.84
C. PEER LEADERSHIP			
1. Peer Support	3.53-3.70	84.03	
	3.34-3.52	80.53	3.50
2. Peer Teamwork	2.84-3.15	83.91	
	2.71-2.83	80.54	3.37
3. Peer Work Facilitation	2.67-2.91	83.91	
	2.46-2.66	80.21	3.70
4. Peer Problem Solving	3.02-3.32	84.12	
	2.84-3.01	80.00	4.13*
D. WORK GROUP PROCESSES			
1. Work Group Coordination	3.06-3.39	84.14	
	2.88-3.05	79.98	4.16*
2. Work Group Readiness	3.49-3.91	83.63	
	3.11-3.48	80.49	3.14
3. Work Group Discipline	2.99-3.45	83.24	
	2.68-2.98	80.87	2.67
E. OUTCOME MEASURES			
1. Satisfaction	3.07-3.35	82.73	
	2.74-3.01	81.39	1.34
2. Integration of Men & Mission	2.62-3.22	83.75	
	2.17-2.61	80.75	3.00

*p < .05

The effect of the time difference on the relationship between REFTRA weighted averages and the HRM Survey indices was explored using Fisher's transformation to z and a t test for differences between coefficients of correlation. The 16 ships that went through full REFTRA were divided into two groups: those ships that had REFTRA more than 9 months prior to the survey and those that were surveyed within 9 months of their REFTRA. The correlation coefficients for the survey with REFTRA calculated for these two groups were transformed to standard scores and the differences between these scores were calculated. Results are presented in Table 7, which shows that differences in the z scores reached significance at the .05 level in four cases. This means that, for 12 HRM indices, the relationship between REFTRA and HRM Survey averages was not significantly different whether REFTRA occurred more than or less than 9 months from the survey date. It can be seen that the relationships between the HRM Survey and REFTRA in almost all cases were stronger for the closer time frame.

Table 7

Relationship Between Weighted REFTRA Means and
HRM Means by Time Between REFTRA and Survey

HRM Survey Index	<u>r</u>	<u>r</u>	<u>Z₁-Z₂</u>
	> 9 Months (N=10)	≤ 9 Months (N=6)	
A. COMMAND CLIMATE			
1. Communications Flow	.24	.73	.684
2. Motivation	-.06	.88	1.316*
3. Human Resource Emphasis	-.08	.95	1.752*
B. SUPERVISORY LEADERSHIP			
1. Supervisory Support	.09	.55	.528
2. Supervisory Teamwork	.40	.76	.572
3. Supervisory Goal Emphasis	.41	.66	.357
4. Supervisory Work Facilitation	.50	.46	.520
C. PEER LEADERSHIP			
1. Peer Support	.50	.52	.280
2. Peer Teamwork	.78	.91	.483
3. Peer Work Facilitation	.63	.83	.447
4. Peer Problem Solving	.82	.59	.479
D. WORK GROUP PROCESSES			
1. Work Group Coordination	.59	.86	.615
2. Work Group Readiness	.77	.79	.051
3. Work Group Discipline	.34	.95	1.478*
E. OUTCOME MEASURES			
1. Satisfaction	.01	.79	1.060
2. Integration of Men and Mission	.14	.88	1.235*

*Difference significant at the .05 level.

CONCLUSIONS AND RECOMMENDATIONS

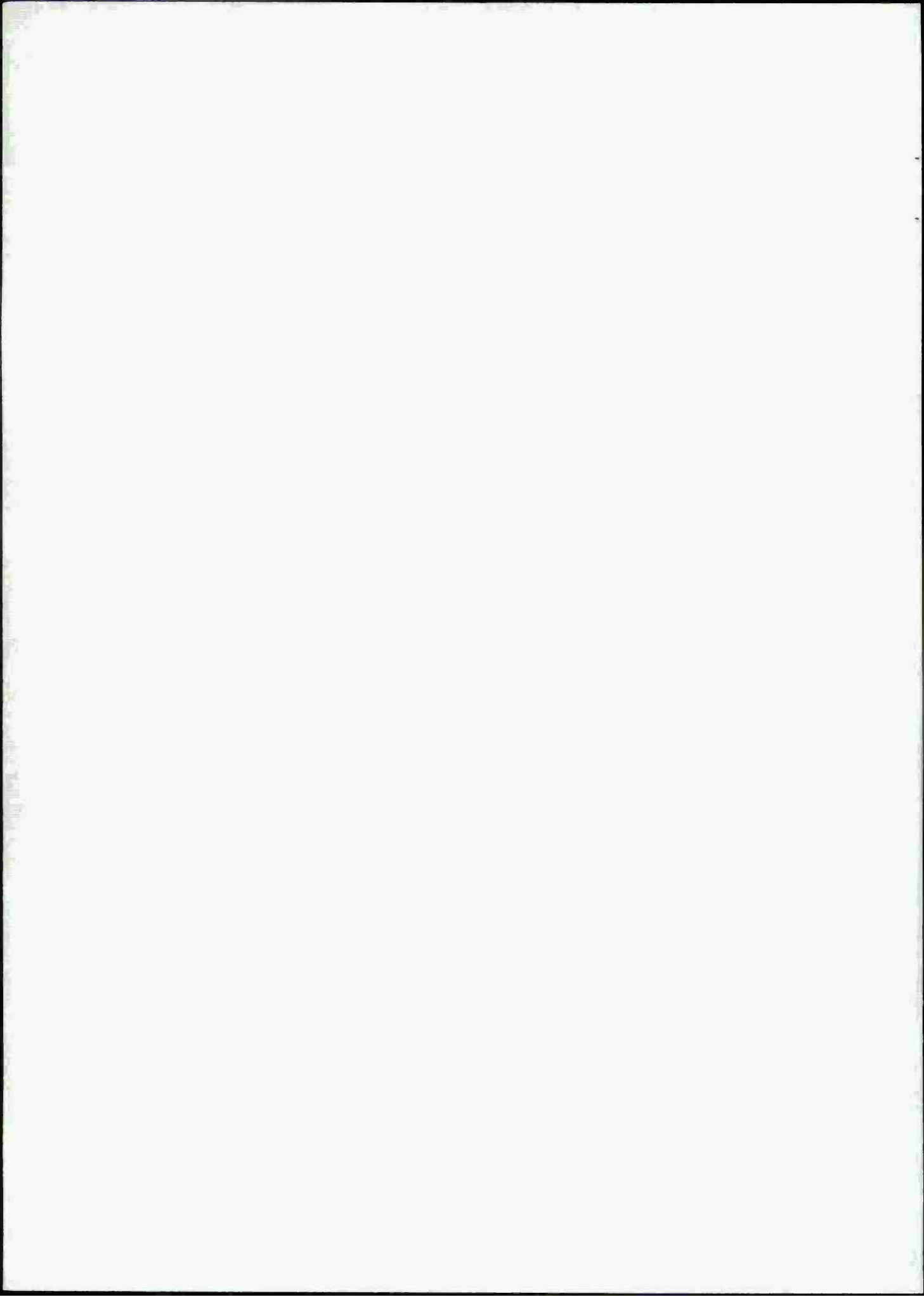
The results of this analysis support the hypothesis that there is a positive relationship between operational readiness as measured during REFTRA and the human resource management system present within a ship. This is particularly true in cases where peer leadership and work group processes have produced both perceived organizational effectiveness (high HRM Survey scores) and favorable performance outcomes (high REFTRA scores).

Since it has been shown that certain key indices relate more strongly than others to REFTRA scores, it would seem useful for HRM consultants, who are working with commands that choose to focus on scoring well in REFTRA, to concentrate on those identified indices as part of their survey guided development. Use of the survey as a diagnostic tool might be further strengthened by collecting REFTRA data that follows survey administration to ascertain the stability of the relationship following the HRM intervention. Those ships where the focus of the consultant intervention concentrates on REFTRA would provide a special group to be studied for impact of the HRM Program. Thus, it is strongly recommended that post survey REFTRA data be collected and analyzed.

The low overall correlation (.47) between the weighted and unweighted REFTRA averages provides evidence that the measures are not equivalent. It is recommended that attempts be made to develop a weighted average for interim training. Normal weighting factors could be used for this process. This would greatly increase the number of ships that could be used to investigate the relationship between REFTRA and the HRM Survey.

Generalizing these results to all ships would be premature. This study was accomplished entirely with the Pacific Fleet data since data collected from the Fleet Training Group Atlantic was not compatible with the West Coast data. This needs further investigation and possible replication of this analysis using only the Atlantic Fleet data if the two systems cannot be reconciled. In any case, a larger sample of ships should be used to investigate the relationship between readiness as measured by REFTRA and human resource management.

In conclusion, previous studies have provided substantial evidence regarding the relationship of human resource management on Navy ships to people-oriented criteria (Crawford & Thomas, 1975; Drexler & Bowers, 1973). The present study, using a mission-oriented criterion, provides equally strong evidence of the importance that effective human resource management has for operational readiness.



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APPENDIX A

NAVY HUMAN RESOURCE MANAGEMENT SURVEY



NAVY HUMAN RESOURCE MANAGEMENT SURVEY

The Navy is highly interested in improving the overall conditions within its commands, promoting individual command excellence, and increasing the satisfaction of personnel toward Navy life. Areas of particular concern include leadership, equal opportunity, race relations, training and utilization of people, motivation and morale, good order and discipline, communications, concern for people, drug and alcohol abuse, and interaction with peoples of other countries.

This survey is intended to provide information that can be used to decide the areas to receive greatest emphasis in the future, both within your command and the Navy in general. If the results are to be helpful, it is important that you answer each question as thoughtfully and frankly as possible. This is not a test; there are no right or wrong answers.

The completed questionnaires will be processed by automated equipment which will summarize the answers in statistical form. Your individual answers will remain strictly confidential, since they will be combined with those of many other persons.



Report Symbol BuPers 5314-6
Process Control No. 09

Department of the Navy

Bureau of Naval Personnel

Research and Evaluation Division (Pers-65)

November 1974

INSTRUCTIONS

1. All questions can be answered by filling in appropriate spaces on the answer sheet. If you do not find the exact answer that fits your case, use the one that is closest to it.
2. Remember, the value of the survey depends upon your being straightforward in answering this questionnaire. Your answer sheets are forwarded directly to the computer center and no one from your command will see them.
3. The answer sheet is designed for automatic scanning of your responses. Questions are answered by marking the appropriate answer spaces (===) on the answer sheet, as illustrated in this example:

Q. To what extent does your supervisor encourage people to give their best effort ?

To a very little extent ===	To a little extent ===	To some extent ===	To a great extent ===	To a very great extent ===

4. Please use a soft pencil, and observe carefully these important requirements:
 - Make heavy black marks that fill the spaces.
 - Erase cleanly any answer you wish to change.
 - Make no stray markings of any kind.
5. Questions about "this command" refer to the ship, squadron or similar operational unit to which you are assigned. Questions about "your supervisor" refer to the person to whom you report directly. Questions about "your work group" refer to all those persons who report to the same supervisor as you do.
6. Below are examples for filling in side 1 of the answer sheet.

Example A: 11. PAY GRADE:

E	Enlisted ===	Officer ===	Warrant ===	GS ===	Wage Grade ===
5	=1=	=2=	=3=	=4=	=5=
	=6=	=7=	=8=	=9=	=10=
	=11=	=12=	=13=	=14=	=15=
	=16=	=17=	=18=	=19=	=20=

Example B: 13. What is your rating designation (EX. BM, ADR, SD) ?
If your rating contains only two letters use the upper two boxes.

E	=A=	=B=	=C=	=D=	=E=	=F=	=G=	=H=	=I=
	=J=	=K=	=L=	=M=	=N=	=O=	=P=	=Q=	=R=
	=S=	=T=	=U=	=V=	=W=	=X=	=Y=	=Z=	
T	=A=	=B=	=C=	=D=	=E=	=F=	=G=	=H=	=I=
	=J=	=K=	=L=	=M=	=N=	=O=	=P=	=Q=	=R=
	=S=	=T=	=U=	=V=	=W=	=X=	=Y=	=Z=	
R	=A=	=B=	=C=	=D=	=E=	=F=	=G=	=H=	=I=
	=J=	=K=	=L=	=M=	=N=	=O=	=P=	=Q=	=R=
	=S=	=T=	=U=	=V=	=W=	=X=	=Y=	=Z=	

COMMUNI-
CATIONS
FLOW

1. Is the amount of information you get about what is going on in other departments or watch sections adequate to meet your needs ?
2. To what extent are you told what you need to know to do your job in the best possible way ?
3. How receptive are those above you to your ideas and suggestions ?

DECISION
MAKING

4. Decisions are made in this command at those levels where the most adequate information is available.
5. Information is widely shared in this command so that those who make decisions have access to available know-how.
6. When decisions are being made, to what extent are the people affected asked for their ideas ?

MOTIVA-
TION

7. To what extent do you feel motivated to contribute your best efforts to the command's mission and tasks ?
8. Do you regard your duties in this command as helping your career ?
9. Work group members who contribute the most are rewarded the most.

HUMAN
RESOURCE
EMPHASIS

10. To what extent does this command have a real interest in the welfare and morale of assigned personnel ?
11. To what extent are work activities sensibly organized in this command ?
12. This command has clear-cut, reasonable goals and objectives that contribute to its mission.
13. I feel that the workload and time factors are adequately considered in planning our work group assignments.

LOWER
LEVEL
INFLUENCE

14. In general, how much influence do lowest level supervisors (supervisors of non-supervisory personnel) have on what goes on in your department ?
15. In general, how much influence do non-supervisory personnel have on what goes on in your department ?

SUPERVI-
SORY
SUPPORT

16. How friendly and easy to approach is your supervisor ?

SUPERVISORY
SUPPORT (CONT.)

17. When you talk with your supervisor, to what extent does he pay attention to what you are saying ?
18. To what extent is your supervisor willing to listen to your problems ?
19. My supervisor makes it easy to tell him when things are not going as well as he expects.

SUPERVISORY
TEAMWORK

20. To what extent does your supervisor encourage the people who work for him to work as a team ?
21. To what extent does your supervisor encourage the people who work for him to exchange opinions and ideas ?

SUPERVISORY
GOAL EMPHASIS

22. To what extent does your supervisor encourage people to give their best effort ?
23. To what extent does your supervisor maintain high personal standards of performance ?

SUPERVISORY
WORK
FACILITATION

24. To what extent does your supervisor help you to improve your performance ?
25. To what extent does your supervisor provide you with the help you need so you can schedule work ahead of time ?
26. To what extent does your supervisor offer new ideas for solving job related problems ?

PEER
SUPPORT

27. How friendly and easy to approach are the members of your work group ?
28. When you talk with the members in your work group, to what extent do they pay attention to what you are saying ?
29. To what extent are the members in your work group willing to listen to your problems ?

PEER
TEAMWORK

30. How much do members of your work group encourage each other to work as a team ?
31. How much do members in your work group stress a team goal ?
32. How much do people in your work group encourage each other to give their best effort ?

PEER TEAMWORK (CONT.) 33. To what extent do people in your work group maintain high standards of performance ?

34. To what extent do members in your work group help you find ways to improve your performance ?

PEER WORK

FACILI-

TATION

35. To what extent do members of your work group provide the help you need so you can plan, organize and schedule work ahead of time ?

36. To what extent do members of your work group offer each other new ideas for solving job related problems ?

PEER

PROBLEM

SOLVING

37. Members of my work group take the responsibility for resolving disagreements and working out acceptable solutions.

38. To what extent do people in your work group exchange opinions and ideas ?

39. To what extent does your work group plan together and coordinate its efforts ?

WORK

GROUP

COORDIN-

ATION

40. To what extent do you have confidence and trust in the members of your work group ?

41. To what extent is information about important events widely exchanged within your work group ?

42. To what extent does your work group make good decisions and solve problems well ?

WORK

GROUP

READI-

NESS

43. To what extent has your work group been adequately trained to handle emergency situations ?

44. My work group performs well under pressure or in emergency situations.

45. My work group can meet day to day mission requirements well.

WORK

GROUP

DISCI-

PLINE

46. The members of my work group reflect Navy standards of military courtesy, appearance and grooming.

47. I feel that Navy standards of order and discipline are maintained within my work group.

Questions 48 through 53 are answered, on the answer sheet, as shown below.

SATISFACTION

Very Dissatisfied	Somewhat Dissatisfied	Neither Satisfied nor Dissatisfied	Fairly Satisfied	Very Satisfied
<div> <div></div> <div></div> <div></div> <div></div> <div></div> </div>	<div> <div></div> <div></div> <div></div> <div></div> <div></div> </div>	<div> <div></div> <div></div> <div></div> <div></div> <div></div> </div>	<div> <div></div> <div></div> <div></div> <div></div> <div></div> </div>	<div> <div></div> <div></div> <div></div> <div></div> <div></div> </div>

48. All in all, how satisfied are you with the people in your work group ?
49. All in all, how satisfied are you with your supervisor ?
50. All in all, how satisfied are you with your job ?
51. All in all, how satisfied are you with this command, compared to most others ?
52. All in all, how satisfied do you feel with the progress you have made in the Navy, up to now ?
53. How satisfied do you feel with your chance for getting ahead in the Navy in the future ?

SATISFAC-
TION

(CONT.)

INTEGRA-
TION OF
MEN AND
MISSION

TRAINING

GENERAL

EQUAL

OPPORTUNITY

54. Does your assigned work give you pride and feelings of self-worth ?
55. To what extent is your command effective in getting you to meet its needs and contribute to its effectiveness ?
56. To what extent does your command do a good job of meeting your needs as an individual ?
57. I have been adequately trained to perform my assigned tasks.
58. To what extent has this command trained you to accept increased leadership ?
59. To what extent has this command trained you to accept increased technical responsibility ?
60. Our supervisor gives our work group credit for good work.
61. To what extent does your supervisor attempt to work out conflicts within your work group ?
62. People at higher levels of the command are aware of the problems at my level.
63. In my chain of command there is a willingness to talk about racial issues.
64. To what extent does this command ensure that you have equal opportunity for advancement in rate/rank ?
65. To what extent does this command ensure that you have equal opportunity for job assignment ?
66. To what extent does this command ensure that you have equal opportunity for housing ?
67. To what extent does this command ensure that you have equal opportunity for education and training ?
68. To what extent does this command ensure that you receive a fair and objective performance evaluation ?
69. To what extent does this command ensure that you have equal opportunity for recreation ?
70. To what extent is military justice administered fairly throughout this command ?
71. In my chain of command there is a willingness to talk about sex discrimination issues.

EQUAL
OPPORTUNITY
(CONT.)

72. In this command work assignments are fairly made.
73. People in this command discourage favoritism.

DRUG
ABUSE

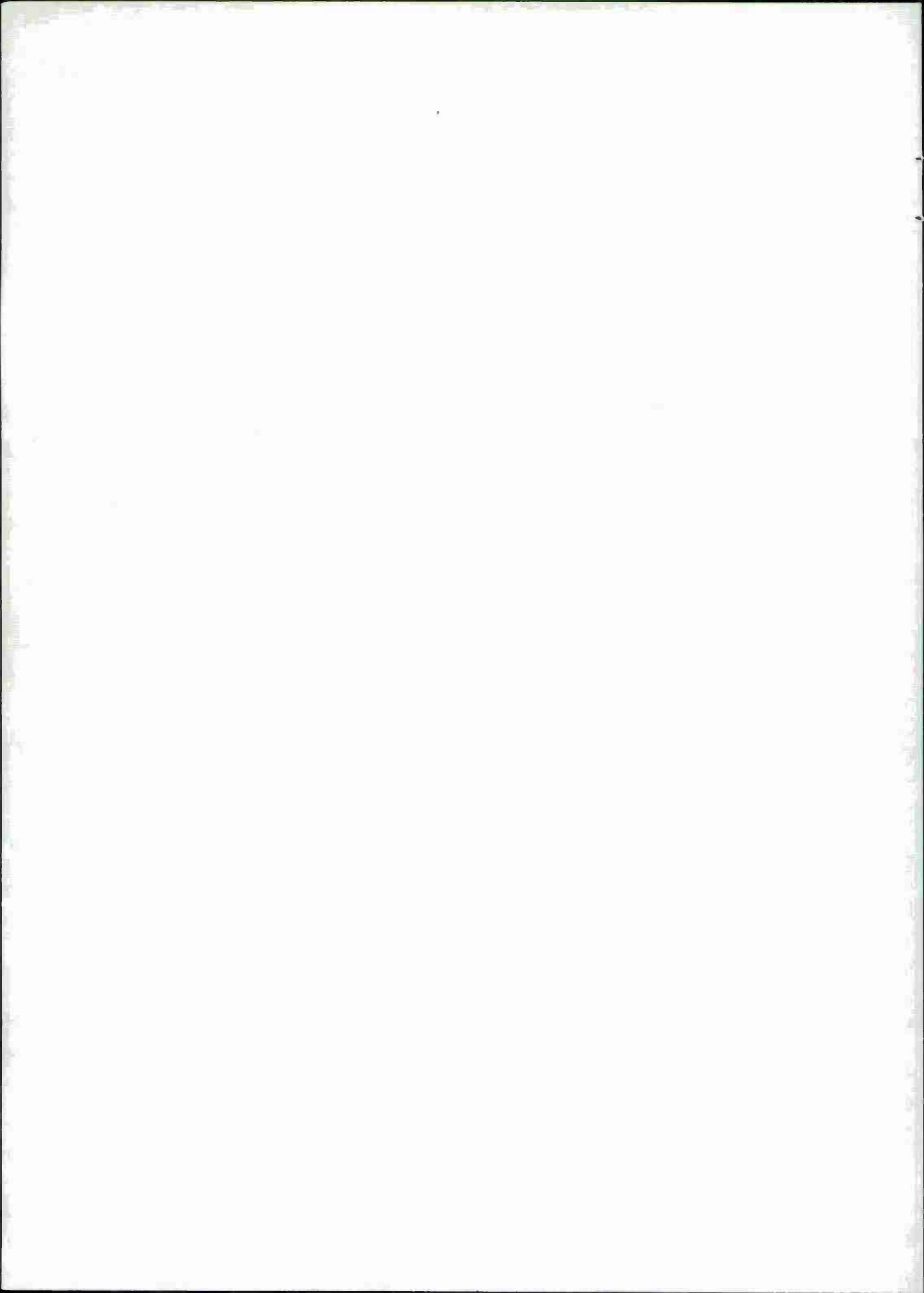
74. To what extent do you understand the reasons contributing to the abuse of drugs ?
75. To what extent do members of your work group discourage drug abuse ?
76. My supervisor can be depended upon to respond helpfully and appropriately to personnel with drug problems.

ALCOHOLISM
PREVENTION

77. To what extent would you feel free to talk to your supervisor about an alcohol problem in your work group ?
78. To what extent does this command promote attitudes of responsibility towards the use of alcoholic beverages ?
79. To what extent do members of your work group discourage the abuse of alcoholic beverages ?
80. To what extent does this command provide alternatives to the use of alcohol at command functions ?
81. To what extent would your work group accept and support a recovered alcoholic ?

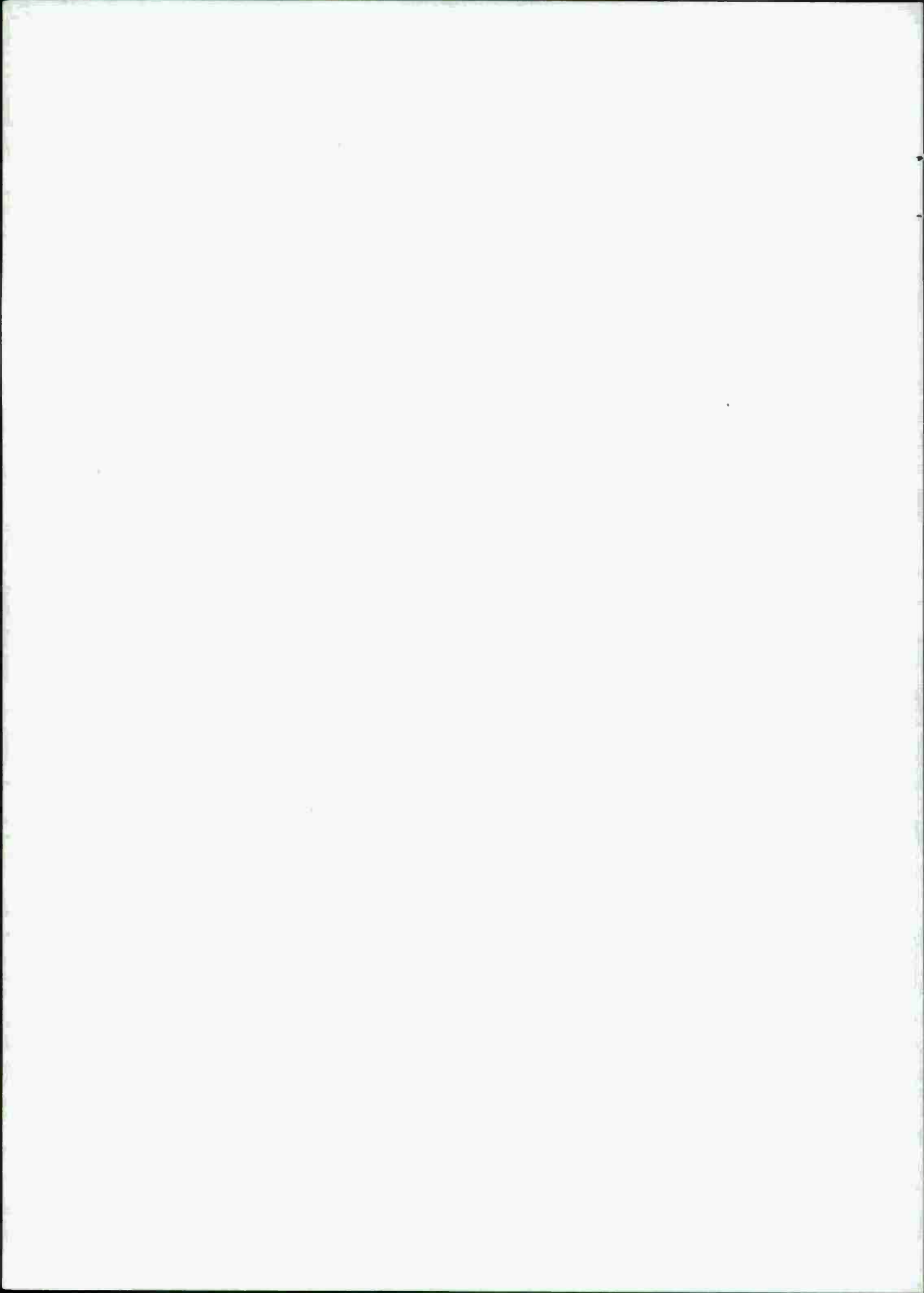
COMMUNITY
INTERRELATION-
SHIPS

82. Do members of your work group care about the image they project when ashore in this area ?
83. Do you consider the effect of your behavior on how people of this area view Navy personnel ?
84. To what extent do you expect to be fairly dealt with while spending money in this area ?
85. To what extent do you feel you have sufficient understanding of the people and customs of this area to get along in this community ?
86. To what extent has information been provided to assist you and/or your family to adjust to living in this area ?
87. Do you have a good understanding of your personal role as a representative of the U. S. when overseas ?
88. Do members of your work group look forward to visiting foreign countries ?



APPENDIX B

SAMPLE BATTLE PROBLEM SCRIPT



APPENDIX A

Sample Battle Problem

CLASSIFICATION

SEQUENCE OF EVENTS

PROBLEM TIME (Minutes)

DISCLOSURE

Minus

45-00 Set Condition YOKE.
 35-00 All observers man their stations.
 30-00 Set Condition ZEBRA.
 15-00 Conduct zero problem time inspection. Navigation observer conduct time check.
 00-00 ZERO PROBLEM TIME. Course 000, speed 15 knots, ship at General Quarters.

Plus

01-00 Surface search radar picks up surface target bearing 286, distance 20,200 yards. Designated as SKUNK ALFA by OTC.
 02-00 ESM operator detects and evaluates hostile aircraft radiations bearing 215.
 03-00 OTC directs this ship to investigate SKUNK ALFA. Air search radar picks up contact bearing 333, distance 50 miles.
 04-00 Change course to 285, increase speed to 20 knots. OTC designates air contact bearing 333 as BOGEY ONE.
 05-00 SKUNK ALFA now shows IFF.
 06-00 Identity of SKUNK ALFA established as friendly. (USS SAND (LKA 40).)
 07-00 OTC directs this ship to proceed and escort USS SAND (LKA 40) to convoy station #23.
 07-30 ESM operator detects and evaluates hostile surface ship radiations bearing 215.
 08-00 Air search radar picks up another air contact bearing 250, distance 49 miles.
 09-00 OTC designates air contact bearing 250 as BOGEY TWO.
 12-00 Surface search radar picks up surface target bearing 215, distance 13,500 yards. OTC designates as SKUNK BRAVO.
 14-00 OTC directs this ship to investigate SKUNK BRAVO, friendly to proceed independently.
 15-00 Change course to 210, increase speed to 25 knots.
 16-30 SKUNK BRAVO opens fire on this ship.

APPENDIX A TO FXP 3-2(B)

- 17-00 HIT ALFA. OTC commences evasive action with convoy.
 - 19-00 HIT BRAVO. Speed reduced to 18 knots.
 - 19-15 Surface radar contact with SKUNK BRAVO lost (submarine submerges):
 - 20-00 OTC directs this ship to search area of last estimated position of SKUNK BRAVO.
 - 21-00 BOGEY TWO splitting. OTC designates BOGEY TWO ALFA and TWO BRAVO.
 - 22-00 Lookout reports hearing aircraft approaching from 090 relative.
 - 23-00 Dive bombing attack, two aircraft. Bombs land 800 yards on port quarter.
 - 23-15 Lookout reports bombs landed about 800 yards on port quarter.
 - 25-00 BOGEY TWO ALFA splitting. OTC designates BOGEY TWO ALFA ONE and TWO ALFA TWO.
 - 26-00 Sonar contact bearing 150 true, range 2,000 yards. Change speed to 15 knots.
 - 30-00 Conduct ASW attack with appropriate weapons. (Chief observer informs commanding officer of positive kill on submarine.)
- (And so forth to end of problem)

A-2 It is recommended that the following be read to all hands over the general announcing system by the commanding officer about 5 minutes prior to ZERO PROBLEM TIME.

"Attention! This is the Captain speaking. The battle problem which will start in a few minutes is designed to exercise all departments in combat operations. Pay close attention to what I say and try to visualize events as they happen and do your part to demonstrate the combat efficiency of our ship.

"Our ship is number two of four escorts screening six LKAs and LPAs, in three columns of two ships each. We have just received a message that indicates an enemy submarine is operating in the vicinity of the convoy track. There is a possibility of encountering two friendly ships who were scattered from a previous convoy by the recent storm and are now proceeding independently to El Sitko Base which is also our destination.

"It is now about 30 minutes after evening twilight, no moon, overcast, and surface visibility is about 6,000 yards. At zero problem time all ships of the convoy are at General Quarters, as deemed desirable by the OTC.

"Extraneous ships and aircraft operating in this area are not a part of the problem. However, they must still be reported in accordance with the provisions of my standing orders.

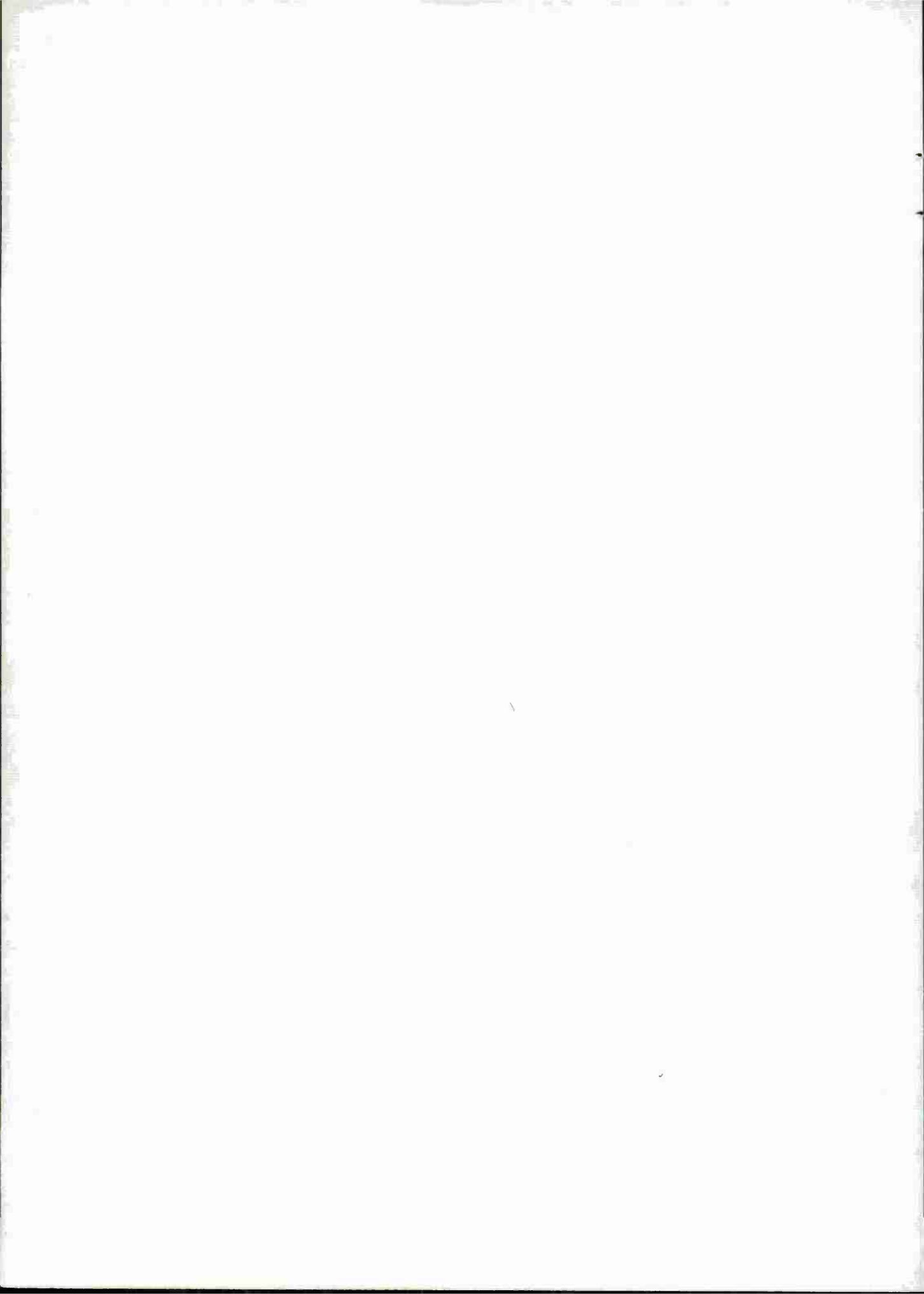
"In case of an actual shipboard casualty, make report of same stating: 'This is an actual casualty.'

"The problem will start in a few minutes, at the end of a long blast on the ship's whistle (or police whistle over this circuit).

"End of message."

APPENDIX C

HUMAN RESOURCE MANAGEMENT SURVEY INDICES



HRM SURVEY INDICES

1. Command Climate

a. Communications Flow (Questions 1-3). Command leadership understands the work and problems of the command. Information flows freely through the chain of command, from the work groups to a listening and responsive leadership and to the work groups concerning plans and problems facing the command.

b. Decision Making (Questions 4-6). Information is widely based within the command and decisions are made at those levels where the most adequate information is available. Supervisors seek out information before making decisions.

c. Motivation (Questions 7-9). The command motivates personnel to contribute their best efforts through rewards for good performance and through career enhancing duties.

d. Human Resource Emphasis (Questions 10-13). The command shows concern for human resources in the way it organizes its personnel to achieve its mission. Personnel within the command perceive that the organization and assignment of work sensibly consider the human element.

e. Lower Level Influence (Questions 14-15). Lowest level supervisors and nonsupervisory personnel have the opportunity to influence what goes on in their department.

2. Supervisory Leadership

a. Supervisory Support (Questions 16-19). Leaders behave in a way which increases the work group member's feelings of worth and dignity.

b. Supervisory Teamwork (Questions 20-21). Supervisors encourage subordinates to develop close, cooperative working relationships with those who work for them.

c. Supervisory Goal Emphasis (Questions 22-23). High standards of performance are set, maintained and encouraged by supervisors.

d. Supervisory Work Facilitation (Questions 24-26). Supervisors help those who work for them to improve performance. Subordinates and supervisors work together to solve problems which hinder task completion and performance.

3. Peer Leadership

a. Peer Support (Questions 27-29). Work group members behave toward each other in a manner which enhances each member's feelings of personal worth.

b. Peer Teamwork (Questions 30-33). The behavior of work group members encourages the development of close, cooperative working relationships. Work group members maintain and encourage high standards of performance.

c. Peer Work Facilitation (Questions 34-35). Work group members help each other improve performance. The work group works together to solve problems which hinder performance and task completion.

d. Peer Problem Solving (Questions 36-38). Work group members work well in solving problems.

4. Work Group Processes

a. Work Group Coordination (Questions 39-42). Work group members plan, coordinate, and support each other effectively.

b. Work Group Readiness (Questions 43-45). The work group is able to adapt to emergency situations and meet its mission.

c. Work Group Discipline (Questions 46-47). Work group members maintain Navy standards of etiquette and discipline.

5. Outcome Measures

a. Satisfaction (Questions 48-54). Personnel within the command are satisfied with their supervisors, the command, other work group members, their job and their present and future progress in the Navy.

b. Integration of Men and Mission (Questions 55-56). The command is seen as effective in getting people to meet the command's objectives as well as meeting individual needs.

6. Problem Areas

a. Training (Questions 57-59)

b. General (Questions 60-62)

c. Equal Opportunity (Questions 63-73)

d. Drug Abuse (Questions 74-76)

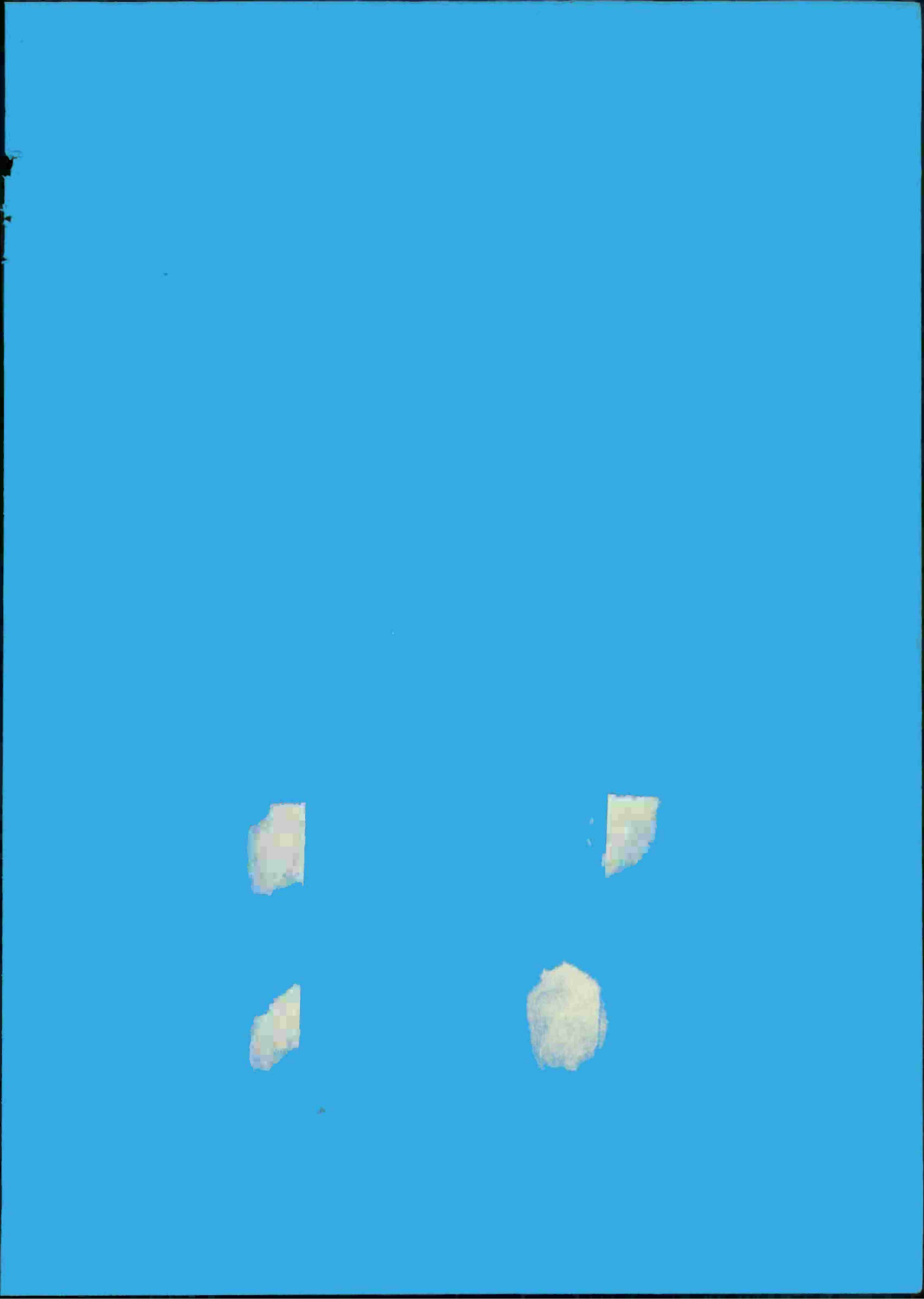
e. Alcoholism Prevention (Questions 77-81)

f. Community Interrelationships (Questions 82-88)

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